

Mr. Michael T. Davis
Algebra II Delta & Eta

Creating Exponential Functions from Ordered Pairs
HW
March 9, 2015

Name: Mr. Davis

Directions: Use the table of ordered pairs, to determine an equation for the exponential function.

1. $f(x) = a(b)^x$

x	$f(x)$
-1	2
0	4
1	8
2	16

$$f(x) = 4(2)^x$$

2. $g(x) = a(b)^x$

X	$g(x)$
-1	$\frac{1}{2}$
1	8
2	32
3	128

$$g(x) = 2(4)^x$$

3. $f(x) = a(b)^x$

x	$f(x)$
-1	$-\frac{1}{9}$
1	-1
2	-3
3	-9

$$f(x) = -\frac{1}{3}(3)^x$$

4. $g(x) = a(b)^x$

X	$g(x)$
-1	$\frac{1}{16}$
1	4
2	32
3	256

$$g(x) = \frac{1}{2}(8)^x$$

5. $k(x) = a(b)^x$

x	$k(x)$
-1	-12
1	$-\frac{3}{4}$
2	$-\frac{3}{16}$
3	$-\frac{3}{64}$

$k(x) = -3\left(\frac{1}{4}\right)^x$

6. $p(x) = a(b)^x$

x	$p(x)$
-1	15
1	$\frac{5}{3}$
2	$\frac{5}{9}$
3	$\frac{5}{27}$

$p(x) = 5\left(\frac{1}{3}\right)^x$

7. $k(x) = a(b)^x$

x	$k(x)$
-2	4
-1	2
2	$\frac{1}{4}$
3	$\frac{1}{8}$

$k(x) = 1\left(\frac{1}{2}\right)^x$

8. $p(x) = a(b)^x$

x	$p(x)$
-2	-24
-1	-12
2	$-\frac{3}{2}$
3	$-\frac{3}{4}$

$p(x) = -6\left(\frac{1}{2}\right)^x$